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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,557	12/19/2005	Andes Monzon	60,469-242; OT-5132 SWO	9849
7590 Theodore W Olds Carlson Gaseky & Olds Suite 350 400 W Maple Road Birmingham, MI 48009			EXAMINER PICO, ERIC E	
			ART UNIT 3654	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/14/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,557	<b>Applicant(s)</b> MONZON ET AL.	
	<b>Examiner</b> Eric Pico	<b>Art Unit</b> 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 3 is objected to because of the following informalities: vertically uppermost portion is not proper. The office recommends the phrase read "vertical uppermost portion." Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim(s) 1, 2, and 4-20 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagaki et al. U.S. Publication No. 2002/0070080 in view of Orrman et al. U.S. Publication No. 2002/0017434.
4. **Regarding claim 1**, Nakagaki et al. discloses an elevator comprising: an elevator car, referred to as cage 20, movable along car guide rails 22, 23; a counterweight 30 movable along counterweight guide rails 31, 32; a bedplate, referred to as connecting beam 33 supported by the car and counterweight guide rails 22, 31, 32; and a machine, referred to as driving unit 40 supported by the bedplate 33 and driving a tension member, referred to as hoist cable 50, 60 interconnecting the counterweight 30 and the car 20, opposed ends of the tension member 50, 60 being

connected at dead end hitches, referred to as anchoring ends 53, 57, 63, 67, the bedplate 33 having a vertically lowermost surface, shown in Figures 1-3, and the dead end hitches 53, 63 end extending above the vertical lowermost surface.

5. Nakagaki et al. is silent concerning the dead end hitches associated with each of the opposed ends of the tension members being received on the bedplate and such that they will be between the car and a single wall when the elevator is mounted within an elevator shaft.

6. Orrman et al. teaches dead end hitches, referred to as first end 10 and second end 11, associated with each of the opposed ends of tension member, referred to as rope 9, being received on a bedplate, referred to as transverse support 17, and such that they will be between the car 2 and a single wall 12 when the elevator is mounted within an elevator shaft.

7. It would have been obvious to one of ordinary skill in the art at the time of the invention to receive the dead end hitches disclosed by Nakagaki et al. on the bedplate and be between the car and a single wall when the elevator is mounted within an elevator shaft as taught by Orrman et al. to provide a compact elevator, requiring as little space as possible in the elevator shaft so as to allow as efficient shaft space utilization as possible.

8. **Regarding claim 2**, Nakagaki et al. discloses the dead end hitches 53, 63 are mounted on the bedplate 33.

9. **Regarding claim 4**, Nakagaki et al. discloses the bedplate 33 is formed by a pair of C-shaped beams, creating an I-beam shown in Figure 2, having an internal space

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and dead end hitches, referred to as anchoring ends 53, 63, positioned within the internal space, shown in Figure 2.

10. **Regarding claim 5, 15, and 17**, Nakagaki et al. is silent concerning the bedplate is supported by both of the car and counterweight guide rails.

11. Orrman et al. teaches a bedplate 17 is supported by both of the car and counterweight guide rails 1, 3.

12. It would have been obvious to one of ordinary skill in the art at the time of the invention to support the bedplate disclosed by Nakagaki et al. by both of the car and counterweight guide rails to facilitate the support of the bedplate.

13. **Regarding claim 6**, Nakagaki et al. discloses a plurality of tension members, referred to as hoist cables 50, 60, and two sets of a corresponding plurality of dead end hitches, referred to as anchoring ends 53, 57, 63, 67, the dead end hitches 53, 57, 63, 67 of each of the two sets being aligned in an array that is generally parallel to a rotational axis, referred to as drive shaft 42, 43, of a machine, referred to as hoist 41.

14. **Regarding claim 7 and 12**, Nakagaki et al. is silent concerning each of the sets of dead end hitches are disposed on opposed lateral sides of the rotational axis of the machine.

15. Orrman et al. teaches dead end hitches 10, 11 disposed on opposed lateral sides of the rotational axis of the machine 8.

16. It would have been obvious to one of ordinary skill in the art at the time of the invention to dispose each of the sets of dead end hitches disclosed by Nakagaki et al.

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on opposed lateral sides of the rotational axis of the machine as taught by Orrman et al. to facilitate the support of each of the sets of dead end hitches.

17. **Regarding claim 8**, Nakagaki et al. discloses the machine 41 comprises a traction sheave 44, 45 having a plurality of sheave surfaces, shown as the surfaces of traction sheave 44, 45, for engaging and driving the plurality of tension members 50, 60, and the dead end hitches 53, 57, 63, 67 disposed within an axial distance defined by ends of the traction sheave 44, 45.

18. **Regarding claim 9**, Nakagaki et al. discloses each of the sheave surfaces are aligned with a respective one of the dead end hitches 53, 57, 63, 67 in each of the sets of dead end hitches 53, 57, 63, 67 such that a line drawn through one of the sheave surfaces and its two associated dead end hitches 53, 57, 63, 67 is perpendicular to the rotational axis 42, 43.

19. **Regarding claim 10**, Nakagaki et al. discloses the machine comprises a traction sheave 44, 45 having a plurality of sheave surfaces for engaging and driving a plurality tension members 50, 60, wherein each of the sheave surfaces are aligned with a respective pair of the dead end hitches 53, 57, 63, 67 such that line drawn through one of the sheave surfaces and its two associated dead end hitches 53, 57, 63, 67 are perpendicular to a rotational axis 42, 43 of the traction sheave 44, 45.

20. **Regarding claim 11**, Nakagaki et al. discloses an elevator comprising: an elevator car 20 movable along car guide rails 22, 23; a counterweight 30 movable along counterweight guide rails 31, 32; a bedplate 33 supported by the car and counterweight guide rails 22, 31, 32; and a machine 40 supported by the bedplate 33 and driving a

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plurality of tension members 50, 60 interconnecting a counterweight 30 to a car 20, opposed ends of the tension members 50, 60 being connected at dead end hitches 53, 57, 63, 67, there being two sets of aligned dead hitches 53, 57, 63, 67, each set of dead hitches 53, 57, 63, 67 in an array that is generally parallel to a rotational axis 42, 43 of a machine 41.

21. Nakagaki et al. is silent concerning the dead end hitches associated with each of the opposed ends of the tension members being received on the bedplate and such that they will be between the car and a single wall when the elevator is mounted within an elevator shaft.

22. Orrman et al. teaches dead end hitches, referred to as first end 10 and second end 11, associated with each of the opposed ends of tension member, referred to as rope 9, being received on a bedplate, referred to as transverse support 17, and such that they will be between the car 2 and a single wall 12 when the elevator is mounted within an elevator shaft.

23. It would have been obvious to one of ordinary skill in the art at the time of the invention to receive the dead end hitches disclosed by Nakagaki et al. on the bedplate and be between the car and a single wall when the elevator is mounted within an elevator shaft as taught by Orrman et al. to provide a compact elevator, requiring as little space as possible in the elevator shaft so as to allow as efficient shaft space utilization as possible.

24. **Regarding claim 13**, Nakagaki et al. discloses the machine comprises a traction sheave 44, 45 having a plurality sheave surfaces for engaging and driving the tension

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members 50, 60, and the dead end hitches 53, 57, 63, 67 are disposed within an axial distance defined by the ends of the traction sheave 44, 45.

25. **Regarding claim 14**, Nakagaki et al. discloses wherein each of the sheave surfaces are aligned with a respective one of the dead end hitch 53, 57, 63, 67 in each of the sets of dead end hitches 53, 57, 63, 67 such that a line drawn through one of the sheave surfaces and its two associated dead end hitches 53, 57, 63, 67 is perpendicular to the rotational axis 42, 43.

26. **Regarding claim 16**, Nakagaki et al. discloses an elevator comprising: an elevator car 20 movable along car guide rails 22, 23; a counterweight 30 movable along counterweight guide rails 31, 32; a bedplate 33 supported by the car and counterweight guide rails 22, 31, 32; and a machine 40 supported by the bedplate 33 comprising a traction sheave 44, 45 for engaging and driving a plurality of tension members 50, 60 interconnecting the counterweight 30 to the car 20, opposed ends of the tension members 50, 60 being connected via dead end hitches 53, 57, 63, 67 to the bedplate 33, the traction sheave 44, 45 having a plurality of sheave surfaces corresponding to the plurality of tension members 50, 60, wherein each of the sheave surfaces are axially aligned with a respective pair of the dead hitches 53, 57, 63, 67 such that a line drawn through one of the sheave surfaces and its two associated dead end hitches 53, 57, 63, 67 are perpendicular to a rotational axis 42, 43 of the traction sheave 44, 45.

27. Nakagaki et al. is silent concerning the dead end hitches associated with each of the opposed ends of the tension members being received on the bedplate and such that



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they will be between the car and a single wall when the elevator is mounted within an elevator shaft.

28. Orrman et al. teaches dead end hitches, referred to as first end 10 and second end 11, associated with each of the opposed ends of tension member, referred to as rope 9, being received on a bedplate, referred to as transverse support 17, and such that they will be between the car 2 and a single wall 12 when the elevator is mounted within an elevator shaft.

29. It would have been obvious to one of ordinary skill in the art at the time of the invention to receive the dead end hitches disclosed by Nakagaki et al. on the bedplate and be between the car and a single wall when the elevator is mounted within an elevator shaft as taught by Orrman et al. to provide a compact elevator, requiring as little space as possible in the elevator shaft so as to allow as efficient shaft space utilization as possible.

30. **Regarding claim 18-20**, Nakagaki et al. is silent concerning a dead end hitch associated with one of the opposed ends of the tension members being on a first side of a rotational axis of the traction sheave, and a dead end hitch associated with the other of the opposed ends of the tension members being on an opposed side of the rotational axis of the traction sheave.

31. Orrman et al. teaches a dead end hitch 10 associated with one of the opposed ends of the tension member 9 being on a first side of a rotational axis of the traction sheave 5, and a dead end hitch 11 associated with the other of the opposed ends of the

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tension member 9 being on an opposed side of the rotational axis of the traction sheave 5.

32. It would have been obvious to one of ordinary skill in the art at the time of the invention to dispose a dead end hitch associated with one of the opposed ends of the tension members disclosed by Nakagaki et al. on a first side of a rotational axis of the traction sheave as taught by Orrman et al. and dispose a dead end hitch associated with the other of the opposed ends of the tension members disclosed by Nakagaki et al. on an opposed side of the rotational axis of the traction sheave as taught by Orrman et al. to facilitate the support of each of the sets of dead end hitches.

33. Claim(s) 3 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagaki et al. U.S. Publication No. 2002/0070080 in view of Orrman et al. U.S. Publication No. 2002/0017434 as claimed in claim 2 and further in view of Ando U.S. Patent No. 6435316.

34. **Regarding claim 3**, Nakagaki et al. discloses the bedplate 33 is formed by at least one beam and the dead end hitches 53, 63 are supported by a vertical portion of the beam 33.

35. Nakagaki et al. is silent concerning the dead end hitches are supported by a vertical uppermost portion of the beam.

36. Ando teaches a bedplate, referred to as rope end fixing member 37, is formed by at least one beam, and the dead end hitches, referred to as fastening member 19, are supported by a vertical uppermost portion of the beam 37, shown in Figure 3.

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37. It would have been obvious to one of ordinary skill in the art at the time of the invention to support the dead end hitches disclosed by Orrman et al. by a vertical uppermost portion of the beam as taught by Ando to facilitate the connection between the bedplate and the dead end hitches.

### ***Response to Arguments***

38. Applicant's arguments filed 12/14/2006 have been fully considered but they are not persuasive.

39. In response to applicant's argument that "There would be no reason to change this arrangement, even if there was prior art which might show the feature". The argument that "There would be no reason to change this arrangement" relies upon the assertion that because Nakagaki et al. discusses "cables mounted on one side to a connecting beam 33 (53, 63). The other end of the cable is mounted to a remote side of an elevator shaft (57, 67)", there would be no reason to change this arrangement. This argument is without merit because, while the preferred embodiment of Nakagaki et al. does show cables mounted on one side to a connecting beam and the other end of the cable mounted to a remote side of an elevator shaft, a statement indicating the desirability of having cables mounted on one side to a connecting beam and the other end of the cable mounted to a remote side of an elevator shaft in no way criticizes, discredits, or otherwise discourages the solution of dead end hitches on one side of the car, and between the car and a single wall once the elevator is mounted in an elevator shaft claimed.

***Conclusion***

40. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Pico whose telephone number is 571-272-5589. The examiner can normally be reached on 6:30AM - 3:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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